

PUBLIC HEALTH PROGRESS
IN NEW YORK CITY

1934-1941



DEPARTMENT OF HEALTH, CITY OF NEW YORK
125 WORTH STREET

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THE COMMON COUNTRY

Journal

PUBLIC HEALTH PROGRESS IN NEW YORK CITY

A SUMMARY OF MAJOR DEVELOPMENTS IN THE NEW
YORK CITY HEALTH DEPARTMENT FROM 1934-1941

F. H. LAGUARDIA
Mayor

JOHN L. RICE, M.D.
Commissioner of Health

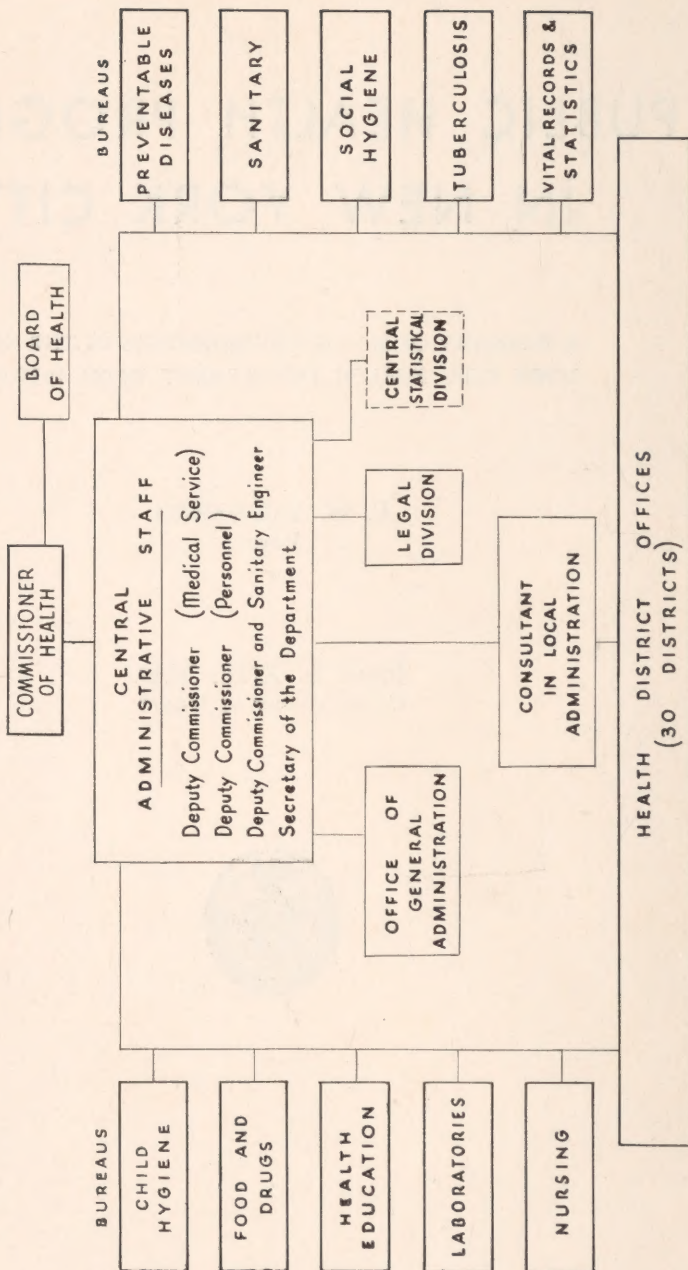


DEPARTMENT OF HEALTH, CITY OF NEW YORK
125 WORTH STREET

March 12, 1941

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ORGANIZATION CHART
DEPARTMENT OF HEALTH OF NEW YORK CITY



THE DEPARTMENT OF HEALTH

1941

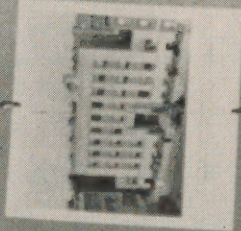
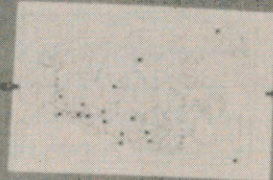
THE BOARD OF HEALTH

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<i>Members:</i>	HAVEN EMERSON, M.D.
	JOHN E. JENNINGS, M.D.
	DAVID M. HEYMAN
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<i>Secretary</i>	<i>The Secretary of the Department</i>

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<i>Deputy Commissioner</i>	GEORGE T. PALMER, DR. P.H.
<i>Sanitary Engineer and</i> <i>Deputy Commissioner</i>	SOL PINCUS, C.E.
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<i>Administrative Assistant</i>	SAVEL ZIMAND
<i>Directors of Bureaus</i>	
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<i>Laboratories</i>	RALPH S. MUCKENFUSS, M.D.
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<i>Child Hygiene</i>	LEONA BAUMGARTNER, M.D.
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<i>Consultant in Local Administration</i>	MARGARET W. BARNARD, M.D.
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<i>Chief Clerk</i>	MATTHEW A. BYRNE
<i>Departmental Counsel</i>	I. ROBERT WOLF

OF RECENT YEARS 1934-1941



1934 - 1941
HEALTH CENTER DEVELOPMENT IN NEW YORK CITY
Bringing the Health Department's Services Closer to the People
New York City has completed fourteen new health centers with the fifteenth and under way.
The City has been divided into thirty health districts and plans provide for a health center building in each.
Nine model child health stations were erected and several additional units remodeled to replace crowded rented quarters.
Federal funds helped make possible this expansion of health services for more than seven million New Yorkers.



PUBLIC HEALTH PROGRESS IN NEW YORK CITY

1934-1941

PUBLIC HEALTH work is essential for the welfare of any community, whether in normal times or in periods of special stress. The nerve center of a city's public health activities is its health department. On its strength depends the effectiveness of the city's public health work.

Among the services conducted by the New York City Health Department at its health centers and elsewhere are prenatal and child health stations; tuberculosis, venereal disease and pneumonia control services; advisory diagnostic services for other communicable diseases; cardiac classification services, eye examination units and dental hygiene clinics for children; antirabic stations and clinics for examinations of children applying for working-papers.

The Department is the custodian of birth and death certificates, provides laboratory services for the diagnosis of many communicable diseases, supervises the health of 1,000,000 school children, maintains strict supervision and control of the milk supply, exercises control over sanitary conditions of food establishments, makes sanitary inspections of dwellings, bathing pools, lodging houses and other establishments, and gives to the people reliable information on health conservation and disease prevention.

The Department has a staff of about 2,960 skilled civil service employees—doctors, dentists, nurses, bacteriologists, chemists, sanitary engineers, veterinarians, inspectors, statisticians, clerks and stenographers. It also has the services of workers made available by the W.P.A., N.Y.A. and through Social Security funds.

The activities of the Department are directed by the Health Commissioner, appointed by the Mayor, who is assisted by three Deputy Commissioners, the Secretary of the Department and 10 bureau directors.

The staff functions through 10 bureaus in addition to the Office of General Administration and of a Central Administrative Staff

(see organization chart of the Health Department p. 2). The 10 bureaus are: Health Education, Tuberculosis, Nursing, Laboratories, Sanitary, Vital Records and Statistics, Social Hygiene, Food and Drugs, Preventable Diseases and Child Hygiene.

The legislative body of the Health Department is the Board of Health which consists of the Health Commissioner, as chairman, and four non-salaried members appointed by the Mayor. The Board enacts the Sanitary Code for the city.

During the past eight years the Health Department has made substantial advances in the protection of the health of the city's population. The health of New York City compares most favorably with that of other cities. In fact the health of our 7,500,000 people was never better than during the past eight years. This is so in spite of the many special problems and hazards which arise in a city with such an aggregation of human beings, such a mixture of races, such tremendous needs for food, water supply, and medical and nursing care, and with such a wide range in economic status.

It is a truism to say that much still remains to be done in intensifying the work of the Health Department. But real progress has been made in broadening and improving the Department's activities, from venereal disease control to diphtheria eradication and supervision of the city milk supply, from laboratory service to pneumonia and tuberculosis control. The city's investment for its Health Department is paying good dividends, as the following figures will show.

FIGURES THAT SPEAK

One of the best measures of a community's state of health and of the effectiveness of its health department is the death rate among children under one year of age. Infant mortality rates attained new lows, decreasing steadily from 53 per 1,000 live births in 1933 to 35 per 1,000 live births in 1940. The puerperal death rate decreased from 6 per 1,000 terminated pregnancies in 1933 to 3 per 1,000 terminated pregnancies in 1940. In this period the lowest general death rate in the city was recorded. In 1940 the city with an estimated mid-

year population of 7,468,000 had 76,008 deaths (giving a crude death rate from all causes of 10.2 per 1,000) and 107,287 live births (14.4 per 1,000).

During the years 1934-1940 the city had the lowest number of diphtheria cases and deaths. Diphtheria deaths decreased from 86 in 1933 to 10 in 1940, and diphtheria cases dropped from 1,891 in 1933 to 386 in 1940. The city also attained a new low tuberculosis death rate. Tuberculosis mortality dropped from 64 per 100,000 population in 1933 to 49 per 100,000 population in 1940. Pneumonia mortality declined from 107 per 100,000 population in 1933 to 46 in 1940. Typhoid fever is definitely on its way out. New low mortality rates also were recorded for automobile accidents, whooping cough, measles and certain other diseases.

SURVEYS OF 1934

Immediately after January 1, 1934, two basic studies were instituted: (1) a personnel inventory, covering nature of duties and quality of work of all employees; and (2) an appraisal by public health specialists of the services rendered by the Department.

These surveys, the first check-up made in many years, disclosed that the New York City Health Department, which has had a long and notable history of achievement, lacked professionally trained people in key positions. These studies also revealed the survival of many practices long recognized as outmoded by public health authorities; duplication of work, an appreciable amount of unnecessary clerical activity; and the need for new procedures.

In January, 1934, there were approximately 2,500 employees. There were at that time 10 major bureaus or divisions in addition to General Administration. They were: Records, Laboratories, Health Education, Preventable Diseases, Child Hygiene, Nursing, Food and Drugs, Sanitary, Tuberculosis and Venereal Diseases. Of these 10 major public health activities only four—Laboratories, Health Education, Nursing and Sanitary, had full-time directors. The remaining six major activities had either part-time or acting directors.

Reorganization of Work and New Measures. The situation described above was corrected by obtaining full-time leadership for all major activities of the Department and by assigning three deputies to share the administrative responsibilities which one deputy commissioner had carried prior to 1934. Parts of the Sanitary Code were revised. Outmoded practices were discarded.

New measures undertaken during the past eight years included: an extensive health building program—the largest health building program ever undertaken by any city; putting into effect a broad health center program; intensive campaigns against tuberculosis, syphilis and pneumonia; the strengthening of the bacteriological, epidemiological, health education, nursing and vital statistics services; improvement of the quality of the child and school health services; reorganization of the bureaus responsible for the supervision of the food supplies and of environmental hygiene; extension of facilities for dental care of school children; the inauguration of a training program for the personnel of the Department; the establishment of a Public Health Research Institute, and the inauguration of an intensive nutrition education campaign.

Of significance are studies in syphilis, gonorrhea, influenza, pneumonia, tuberculosis, diphtheria, maternal and neonatal mortality, school health administration and a survey of crippled children, conducted by the Department since 1934.

Certain activities of public health which were non-existent or received only little emphasis before 1934 were introduced or greatly extended with the assistance of P.W.A., W.P.A., Social Security funds, U. S. Public Health Service, U. S. Children's Bureau, N.Y.A. and other agencies.

The relations between the Health Department and the medical profession and all other agencies, public and private, concerned with public health problems were greatly improved and the Department has had their active cooperation. Machinery was established for securing a better understanding of the many health problems and procedures related to the schools.

THE BOARD OF HEALTH

The Board of Health, the legislative branch of the Health Department, formerly was made up of commissioners of three city departments and two physicians appointed by the Mayor. The physicians were paid \$50 a session. The Board met weekly. The complexion of the Board was changed, and since 1934 the new appointees receive no remuneration. The members of the Board are appointed for eight-year terms and the term of one member expires every two years. This is a very desirable feature for at all times there will be a majority of experienced members on the Board.

Many administrative duties formerly handled by the Board were transferred to the various bureaus of the Department; the Board concentrated on matters of major policy; the meetings of the Board were reduced to a monthly basis and the city saved \$4,600 a year.

BUDGET AND PERSONNEL

The civil service personnel of the Health Department in 1941-1942 consisted of about 2,960 civil service employees (as against 2,500 in 1934) and the total approved city budget amounted to \$5,807,450 (as against \$4,725,762). This increase, together with the elimination of unproductive work, made possible the addition of new services and the expansion of syphilis, tuberculosis and pneumonia control, school health, dental hygiene and other health work. Grants and assistance in services received from the federal government as well as from private agencies effectively aided the Department's program.

INCREASED ADMINISTRATIVE EFFICIENCY

Stopping unproductive activities, as the following examples will indicate, led to appreciable savings and increased efficiency.

One of the early dramatic incidents that encouraged the Department in its attempt to improve procedures was the finding in 1935 of weekly reports of data which one bureau had asked of another bureau back in

1931. They were still being transmitted regularly, and faithfully filed. No one seemed to know why they were sent or what they were for. Admittedly no one made use of them. Eventually it was learned that a request made for a specific purpose four years earlier and which took two weeks out of every month of a clerk's time, had been started by a person who died three months after making the request. The man was gone, the purpose of the report had ended and no one was making use of the material. The procedural machinery once started, however, had ground on for four years. The report was stopped and an \$800 saving made.

A special complaint office with three clerks once existed. Extensive facts were entered on a complaint blank and a complaint book, and a card index file was maintained. The complaint blank was sent usually to the Sanitary Bureau or the Bureau of Food and Drugs. There the complaint was copied and given to an inspector and another card was made out to show the disposition of the complaint. Altogether the time of 12 clerks was spent on handling these complaint records. By the substitution of a triplicate record and carbon paper, and the elimination of unnecessary books and card indices, the same purpose is served and the time of four and a half clerks saved. Translated into money this meant an annual saving of about \$5,000.

Before a permit was issued by the Board of Health for a wholesale milk business, a filled-out application blank went through a tortuous course and accumulated eight signatures before winding up in the lap of the Board. The signature contributors were the inspector who inspected the place, the supervising inspector, the inspector of permits, the supervisor in charge of the city milk work, the chief of the Milk Division, the chief reviewer who checked the correctness of all the previous signatures, the director of the Bureau of Food and Drugs, and finally, the secretary of the Board of Health. The number of signers was restricted to four people, which served all necessary purposes.

Formerly there was a payroll clerk attached to each bureau, eight clerks giving their major time and two clerks a smaller portion of time to this service. They were very busy for part of the month but had little to do at other times. The work was not uniformly done. Errors occurred and were cumbersome to check. To correct this situation a payroll division was formed in the auditor's office, five clerks were detached from the

bureaus to concentrate on the work, and the other five released for other purposes. Simplification of service and reduction in errors resulted.

For some time after the sale of loose milk in grocery stores had been prohibited in the City of New York, the Department was still issuing permits even though the milk was sold in bottles. By eliminating the requirement for these permits, the Department did away with the taking of 3,000 applications yearly, eliminated the mailing of about 3,000 permits, eliminated approximately 5,000 inspections each year and made unnecessary the keeping of indices and the typing of lists of permits granted, denied and revoked. This saved the time of one clerk, one inspector and the half-time of one stenographer, which amounted to \$3,500 yearly. It also saved the time of thousands of small store owners who were required to leave their places of business to come to the Department to file their applications. This worked a great hardship on them, for in many instances they had no help and either had to close their stores or hire someone to handle the business during their absence.

The issuance of renewals of permits to conduct restaurants, barber shops and beauty parlors, where such businesses had changed ownership, was held up until inspections were made. In 1,500 cases a year the inspections were so delayed that the place had again changed hands, or the man had gone out of business when the inspector arrived. This system was altered so that, except where structural changes were involved, permits or renewals were issued at the time of application and the fee paid. The inspection was made later. This change prevented long delays in the issuance of permits and added to the city treasury \$15,000 yearly which previously had been lost.

In the fall of 1939 a new procedure became effective in the tuberculosis clinics. Instead of filling out a four-page history sheet on ever person coming to the clinics for the first time, a brief history on one side of a 5 x 8 card is filled out and the applicant is x-rayed on a paper film. People with positive chest signs then have the longer history forms completed. With the exception of contacts, all others, and this includes the majority, are not examined further. This change saves greatly the time of physicians and nurses in filling out histories, and reduces the cost of record forms and film. The total annual saving is estimated to be \$25,000.

Incidentally, in the last few years the recovery of silver from discarded films and solutions has yielded \$600 a year.

FEDERAL AND OTHER GRANTS

Public health administrators agree that every dollar spent on health conservation is many dollars saved in future years. The New York City government not only has appreciated that scientifically administered health work yields good dividends, but also has provided increased appropriations for the Department of Health. Although the Department of Health budget has risen, the municipal funds available for public health work are still not sufficient to permit expansion in all those fields which yield satisfactory returns in health protection. Thus, in order to supplement the work carried on, the Department has welcomed grants from the federal government and other agencies, and its program has been effectively aided and stimulated by this outside aid.

The grants and services made available by the federal government made possible the paper film chest x-raying of large groups of individuals as well as follow-up of those having tuberculosis; the provision of physicians, nurses, technicians and social workers to supplement the Department's syphilis and gonorrhea clinic personnel; the establishment of additional dental clinics; supplementary medical personnel for school health and child health services; a special maternal and child health service; assistance for an administrative school health study; a survey of crippled children; a personnel training project; a maternal and child health demonstration; assistance to the Department's laboratory; and various other projects.

BUILDING PROGRESS

For years one of the difficulties the Health Department faced in trying to provide efficient assistance to the people of the city was the total lack of quarters for some services and the inadequate and even unsafe places for housing other services. This great need for added facilities has been met by a building program, which, with the aid of P.W.A. funds, has become a reality since 1934.

As a result of P.W.A. grant-loans, appropriations by the city and assistance received from the W.P.A., a total of 15 health centers, a

modern laboratory building and nine child health stations were constructed. Since 1934 changes were also made in rented quarters and more adequate places were provided for the Department's health stations. During the period under review the city also carried to completion the new city building which since 1936 has housed the Department of Health, the Department of Hospitals, the Department of Sanitation and the office of the Chief Medical Examiner.

Equipment. In addition to the completion of the largest building program in the Department's history, the past eight years witnessed the purchase of up-to-date equipment. The purchases made resulted not only in replacement of antiquated, broken-down furniture and automobiles, but also improved the efficiency of the Department by making available new typewriters and equipment for the new health center buildings, laboratory and health stations. Dilapidated equipment in the headquarters building also was modernized.

One of 107,287 Born in 1940

C. T. Griffin



HEALTH AND HOUSING

The program of the Health Department was broadened to take account of the close relationship which exists between health and housing. The Department operates child health services in the First Houses development, has provided a special child health demonstration unit in the Queensbridge housing project, conducts infant, tuberculosis and dental services in Harlem River Houses, made plans for a suitable health station in the East Harlem housing development, and has constructed the Williamsburg-Greenpoint Health Center directly across the street from the location of the Williamsburg-Greenpoint housing development. The Red Hook housing project is served by the Red Hook-Gowanus Health Center and a model district child health station.

DISTRICT HEALTH CENTERS

One of the Department's major achievements has been the development of its district health center plan with a unit of Department workers and services in the 30 districts of the city, each with a population of about 250,000. This health center plan, launched in 1934 for normal times, should prove of added value for the unusual times that may lie ahead. It makes possible a more effective neighborhood service job of health education and control, and also provides assistance for training of medical students in public health.

The health center plan dates back about 30 years. Several health districts were organized in 1914 but were given up in 1917. In 1933 the municipality had only one health center, the Central Harlem Health Center, housed in old rented quarters. The East Harlem and Bellevue-Yorkville health center demonstrations (opened in 1921 and 1926 respectively), housed in privately owned buildings, were conducted by private agencies in cooperation with the Health Department. The close of 1940 found the 30 health districts grouped into 20 administrative units, 12 districts functioning as individual units and the remaining 18 forming eight administrative areas. These districts were under the direction of 15 district health officers and five

medical officers-in-charge. Fourteen modern new health center buildings and one remodeled building were in full operation. In 1941 plans were under way for the construction of an additional health center.

The typical health center building provides space for maternity and child health services; tuberculosis, dental and venereal disease stations; nursing services; space for local offices of visiting nursing and welfare agencies; and an auditorium and exhibit room for health education.

The same health services are not available at all centers. Services established in any district depend on what clinics already exist in hospitals of the area and on the economic status of the neighborhood. In some districts for instance the Health Department may operate a child hygiene station but no tuberculosis clinic, a dental station but no syphilis clinic.

Teaching Centers. As part of the district program, a cooperative arrangement of mutual assistance has been worked out with the five medical schools of the city. In districts which include medical schools, health centers are located in close proximity to the schools, and extra space is provided in the five centers to accommodate laboratories and teaching rooms for the schools' professors of preventive medicine. This program makes it possible for medical students to become familiar with the public health services of the district and helps the Department of Health to keep its staff in close working contact with recent developments in the medical field.

Activities in the Districts. Work carried on during the past eight years in the organized districts has resulted in more and better service to the people of these areas and in a more active interest by these communities in their local health problems.

District health officers try constantly to discover and meet the particular problems of each area. They are aided by Departmental facilities, but often achieve their results by stimulating other agencies of the neighborhood to contribute additional services. As a result, community problems have been more clearly defined, and community resources have been increased and more effectively coordinated.

Medical and general advisory committees have been established in the various districts to help formulate sound health programs for each area and to bring about a better understanding between the medical profession, the local agencies, and the Health Department.

THE CAPTAIN OF THE MEN OF DEATH

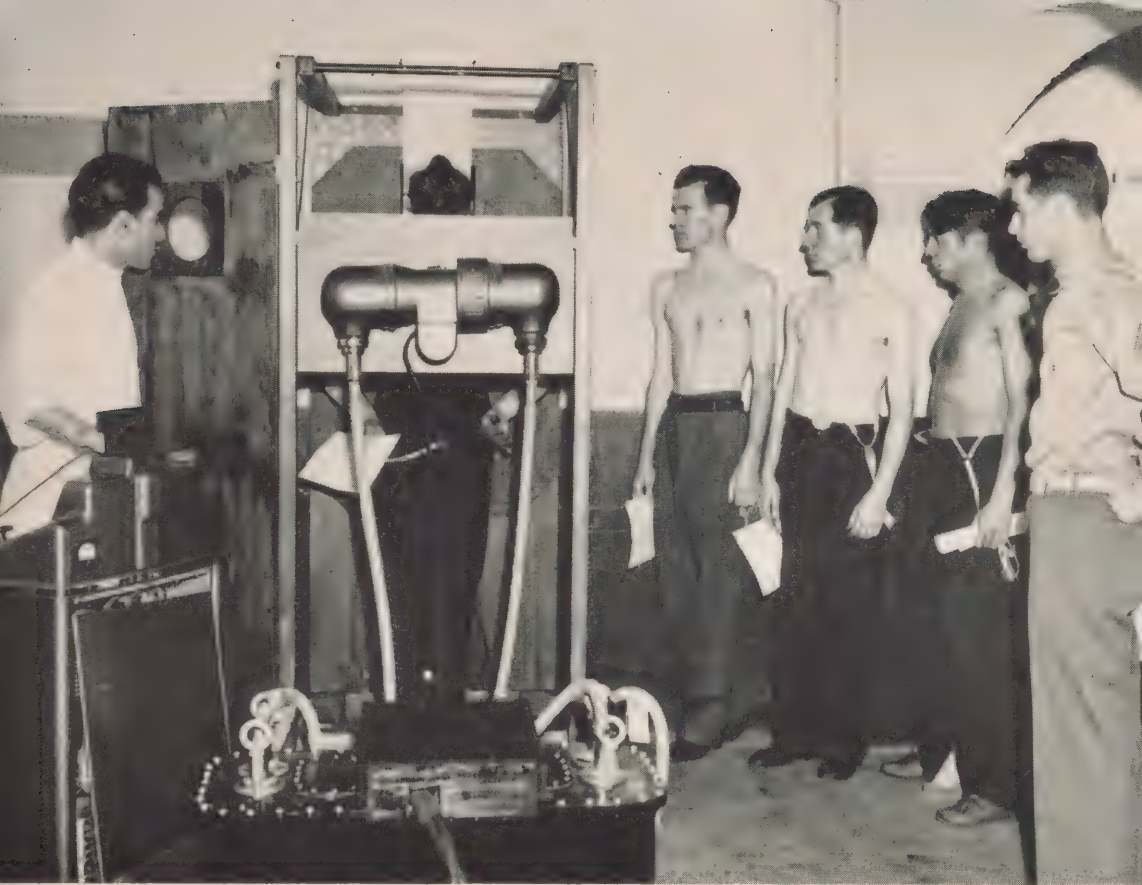
For some years prior to 1934 the major weaknesses of the Department's tuberculosis service were due to lack of full-time professionally trained personnel, lack of sufficient diagnostic facilities, and the absence of a modern business administrative set-up. The chief of the Division of Tuberculosis and the medical staff were part-time employees.

In 1934 a Bureau of Tuberculosis was established with a full-time director. Clinic facilities and clinic supervision were increased and greatly improved. The Department's reorganized tuberculosis service is today more efficient than at any previous time. Its x-ray service compares favorably with the best in the city. All of its 32 tuberculosis stations now have ready access to x-rays, and patients seen in the clinics are routinely x-rayed at the time of the first examination.

Ten of the 32 stations are consultation services designed for patients of private physicians who are unable to pay the standard fees for consultation and x-ray. The findings and recommendations are mailed directly to the physician.

For the past eight years mass x-ray surveys to discover tuberculosis have been under way and have reached over 325,000 persons. In the period 1933-1940 the tuberculosis death rate was reduced by 25 per cent. In terms of lives saved, it is estimated that 1,182 persons were alive at the end of 1940 who would have died that year if the 1933 rate had prevailed.

In 1934 a Central Registration Name File was set up for the entire city. In 1940 there were 48,387 names in this register, which gives an accurate listing of all known tuberculosis cases. Under this new plan all diagnosed cases are checked against this file, so that no obvious duplicates exist.



Searching for Invisible Enemies

Earl Lewis

The Department's tuberculosis diagnostic and clinic services, exclusive of mass x-ray, had an attendance of 189,000 in 1940 as against a total attendance of 112,000 in 1933.

TWO OLD ENEMIES

Since 1934 the Department has conducted vigorous campaigns for the control of syphilis and gonorrhea. In 1935 a separate Bureau of Social Hygiene was established. Fortunately, these diseases are no longer the dark and forbidding territory of public prejudice and opprobrium that they were during the first World War. In the past eight years, public awareness of the problem has become evident on all sides and real progress is being made. In this field, just as in its other activities, the Department has not only strengthened its de-

fenses, but has followed Admiral Mahan's doctrine that "defense is assured only by offense." Reported syphilis cases in 1938 numbered 37,077 as against 30,718 in 1940. In view of the improved reporting system, which prevents duplication, this decrease may perhaps be attributed to an actual reduction in the prevalence of the disease.

To make it possible for patients to remain under the care of private physicians who otherwise would not have been able to treat them, drugs for the treatment of syphilis were distributed without charge to physicians. A program for the follow-up of cases that had ceased treatment while still infectious was carried on. Epidemiological work was extended.

The number of syphilis and gonorrhea sessions per week increased from 33 in 1933 to 156 in 1940. The total attendance at these stations increased from 135,000 in 1933 to nearly 600,000 in 1940. The number of Wassermann tests (made by the Bureau of Laboratories) rose from 184,000 in 1933 to over 631,000 in 1940, and will probably reach 1,000,000 in 1941.

PNEUMONIA CONTROL

Early in 1937 plans were made for an intensive pneumonia control campaign and for promoting the wide use of serum therapy. Additional typing stations were established and these gave the physicians prompt bacteriological diagnosis of their pneumonia patients and sera for treating them. They also afforded the physicians a means for treating pneumonia patients at home.

Nearly 6,500 specimens were examined at the Department's typing stations in 1940 as compared with less than 900 in 1937.

The reduction of about 50 per cent in the pneumonia mortality rate of 1940, as compared with 1937, is a definite indication that the Department's pneumonia control activities are showing striking results.

The Department made available to physicians postgraduate courses on pneumonia and literature which brought the subject up-to-date. Members of the Department's pneumonia control service are

constantly available to physicians for consultation by telephone or in person.

The introduction of sulfapyridine, which became generally available to physicians on April 1, 1939, and the Department's recommendation of its routine use, points toward an adjustment that must take place in pneumonia control. It appears certain that serum will not be as widely used in the future as in the past, but it also appears that serum will be necessary for the care of some cases of pneumonia. It is thus essential that typing be carried out in all cases early in the course of the disease.

HEIRS OF PASTEUR

The diagnosis of many communicable diseases is made possible by laboratory analysis. The scientific work conducted by the Department's laboratories touches intimately the lives of the people every year. In 1934 the two major weaknesses of this service were the lack of adequate staff quarters for research work and the absence on the staff of a bacteriologist who could take the place of the late Dr. William H. Park, who at that time had passed the retirement age.

Since the completion of the new laboratory building in the autumn of 1936, the laboratory work has been carried on under most favorable conditions. In 1935, after carefully surveying the country, a distinguished bacteriologist, who had passed first in the civil service examination, was appointed associate director of these services. On the retirement of Dr. Park in 1936 he was appointed director.

The new discoveries made and the fact that serums and antitoxins have become part of every-day medical practice have so crowded the Department's laboratory with routine activities that it could not devote the time and personnel necessary to enlarge its research work. Therefore in 1941 there was established an Institute of Research within the Health Department.

Following favorable action by the Board of Estimate and the City Council, the Board of Estimate, on Thursday, June 26, 1941, authorized the city to enter into a contract with the Public Health Research

Institute of New York City, Inc.—a corporate structure which is to be a scientific, non-profit organization entirely devoted to obtaining for the city the best available biological products and advanced skills and procedures for combating disease and epidemics which occur or may occur in New York City.

In 1940 the Bureau of Laboratories distributed to the people laboratory products which were valued at about \$321,000.

Stations at which physicians can obtain the necessary diagnostic outfits and leave specimens for transmission daily to the Department's diagnostic laboratories are maintained by the Department in 386 pharmacies, 11 health centers and five borough offices. The location of all these stations has been studied and many were reallocated to give better access and service to physicians. This service, inaugurated in 1893, has grown to large proportions—nearly 1,000,000 such specimens having been examined in 1940.

A special division of the Department's laboratories offers physicians a diagnostic and clinical therapeutic service in acute infections of the central nervous system, such as infantile paralysis and meningitis. Patients are seen in consultation with physicians either in hospitals or at home. About 1,700 consultations with physicians were held in 1940.

PUBLIC HEALTH G-MEN

For some years prior to 1934 the Department's Bureau of Preventable Diseases was headed by a part-time physician. In 1934 this Bureau was reorganized with the aid of a representative from the United States Public Health Service, and an epidemiological service with a trained, full-time chief was established. Changes made to modernize this service included:

Reduction of the scarlet fever quarantine from 28 to 21 days—in accordance with modern practice. A scarlet fever case used to be quarantined 30 days. Intensive study revealed that 21 days are sufficient for safety. The adoption of this change in 1935 has saved nine days' hospital expense for hospitalized cases, which means an annual money-saving to the city and the citizens of \$160,000. It also meant lessened absence time for school

children and less inconvenience and expense to families quarantined in their homes.

Investigation of criminal abortion has been turned over to the Police Department. Formerly this was done by the Health Department, and the evidence collected was passed on to the Police Department. The old system meant duplication, delay and wasted effort.

Studies were made on epidemic diarrhea of the new-born and new sanitary regulations were adopted by the Board of Health regulating lying-in institutions and nurseries for the new-born.

Routine examination of foodhandlers has been discontinued since September, 1934. Experience showed that the issuance of medical examination cards to foodhandlers (360,000 were issued in 1933) did not serve the purpose for which these examinations were intended. In spite of the fact that foodhandler examinations were discontinued in 1934, there has been a constant diminution in typhoid fever cases from 378 cases in 1934 to 171 in 1940. Now foodhandlers, other than those handling milk, are not examined routinely but only when communicable disease is suspected.

Diagnosticians of the Bureau of Preventable Diseases also aid in diagnosis of cases of communicable diseases. In 1940 these diagnosticians made about 24,500 visits as consultants to physicians and hospitals in the investigation of communicable diseases.

SAFEGUARDING CHILDREN

Of the city's estimated 600,000 children under six years of age, the Department's 63 child health stations served in 1940 about 82,500 infants and preschool children.

Procedures in the child health stations have been given a "going-over." Improvements in the services have been accomplished with the assistance of a child health experimental station established in September, 1938. Chief among the problems to be solved was the establishment of a practical appointment system. A concerted effort in this direction during 1939 appears to have had a telling effect. An inquiry into station routines and traffic, as well as elaboration of nurses' conferences and extension of physicians' sessions, has augmented the amount and value of service rendered to clients.

Much still remains to be done for mortality of infants during the first month of life, and especially the first day of life, and the Department is attacking this problem in cooperation with the county medical societies and the New York Academy of Medicine. This work gives promise that neonatal mortality will be further reduced.

Although the maternal mortality rate has fluctuated somewhat in individual years, the marked reduction in the rate during the past few years reflects the excellent work done by the maternal welfare committees of the county medical societies in cooperation with the Department.

There is increasing recognition of the desirability of continuous medical supervision of the pregnant woman by the hospital where delivery takes place. Therefore, in districts with adequate hospital facilities, there is no longer need for the prenatal stations maintained by the Health Department. The number of prenatal stations was reduced from 23 in 1937 to eight in 1940. The Department's prenatal services had a total attendance of about 12,800 in 1940.

TOMORROW'S GROWN-UPS

Measured indirectly in terms of mortality, the school child was never as healthy as he is today. The 5-14 years age group has the lowest mortality rate. During the past eight years, the Department's physicians averaged yearly about 200,000 medical examinations of elementary school children. Nurses made an average of about 250,000 visits yearly to homes to encourage family action on the result of the medical findings. The nurses also held yearly about 300,000 conferences with parents in schools and 300,000 conferences with teachers in the interest of school children.

About 45,400 children applying for working-papers were examined in 1940 by Department physicians in six different centers. In the Department's eye clinics, 57,108 examinations were performed and the cardiac classification service examined about 2,000 children.

In 1934 the Department operated 83 dental clinics which had an attendance of about 165,000. In 1940 the Department conducted 140 dental clinics which had an attendance of nearly 480,000.



Administrative Research Project. In the past eight years the Department has made many improvements in its school health services. During the period 1936-1939 the Health Department and the Department of Education have sponsored a special administrative research project in school health. This work has been financed by private and Federal funds and has received assistance from the State Department of Education. As a result of this research study, which is the subject of an extensive report now being prepared, the Department is getting a greater yield from its expenditures and many procedures in the school health service have been improved. By having more parents at the examinations, by having the physicians take time to explain cases to parents, and by having the nurse present so that she knows first-hand what the doctor is recommending and has a better grasp of the subject when she goes out on a home visit, the Department is getting more prompt attention from parents in carrying out the doctors' recommendations.

The possibilities and needs of a health service for high school students were explored in a study conducted in one of the city's high schools. This project was financed by private funds and received substantial assistance from the W.P.A.

Handicapped Children. The Commission for Study of Crippled Children was appointed by Mayor LaGuardia in May, 1938, to make a comprehensive survey of the facilities for care of children afflicted with diseases of the bone, joints and muscles. The Commission also established a central register of crippled children and suggested a plan for a coordinated program for their physical care, education and vocational training. At a meeting held during January, 1940, the final report of the Commission was approved. In accordance with its recommendations on July 1, 1940, the Department established in its child hygiene service a Division of Crippled Children.

SHOCK TROOPS OF THE DEPARTMENT

The Bureau of Nursing is charged with the responsibility for the direction and administration of the Department's nursing service.



Team Work for Better Health

Maurice L. Lehv

The nurses serve in the Department's clinics, which in the period 1934-1940 had an average yearly attendance of over 1,600,000, protect the health of 1,000,000 children in the public and Catholic schools, make yearly about 550,000 educational home visits, and give instruction at parents' classes on child hygiene and maternity care, which in the period 1934-1940 had an average yearly attendance of about 15,000.

The number of civil service public health nurses was increased from 664 in 1933 to 854 in 1940. Since 1938 the nursing service also conducted an enlarged staff education program and this has resulted in materially improving the quality of the work. Teaching centers for nurses and nursing supervisors were established, and scholarships at local universities (made possible by Social Security funds) were granted.

Generalized Nursing Service. Under the generalized plan, as now in operation in 19 out of 30 health center districts, some nurses remain on full-time duty in charge of certain types of clinics, while others carry out the generalized program by rendering part-time service in the schools, in the clinics and in home visits in relation to all services. A little more of the individual nurse's time is required in a home visit under the generalized than under the specialized service. Under the latter service nurses deal only with a specialty. Under the generalized plan one nurse deals with all the health problems of a family, thus assuring a more complete plan of adjustment to a family's health needs.

Advisory Committee on Nursing. This citizens' group, appointed by the Commissioner in 1936, has continued to render aid by stimulating public interest in the nursing service. In order to familiarize the members of the Committee with the Department's nursing activities, sub-committees were designed to arrange observation visits. Many of the members availed themselves of this opportunity.

This Committee also issued several editions of a popular leaflet, "What the Public Health Nurse Does for You." About 25,000 copies were distributed through schools, health centers and Department headquarters. Copies were also sent by mail to special groups of citizens active in religious, civic and social activities.

PROTECTING THE CONSUMER

The Health Department exercises control over the sanitary condition of about 150,000 establishments which manufacture, store, sell or dispense food and medicinal products. Since 1934 this service has undergone reorganization and was strengthened and improved materially.

In protecting the public against adulteration and misbranding of foods and drugs and against insanitary environmental conditions, the Department has followed an educational policy, and has scrutinized thoroughly each complaint before presenting it for prosecution. Only

cases of actual violation, which cannot be corrected except by legal action, are taken to the Courts.

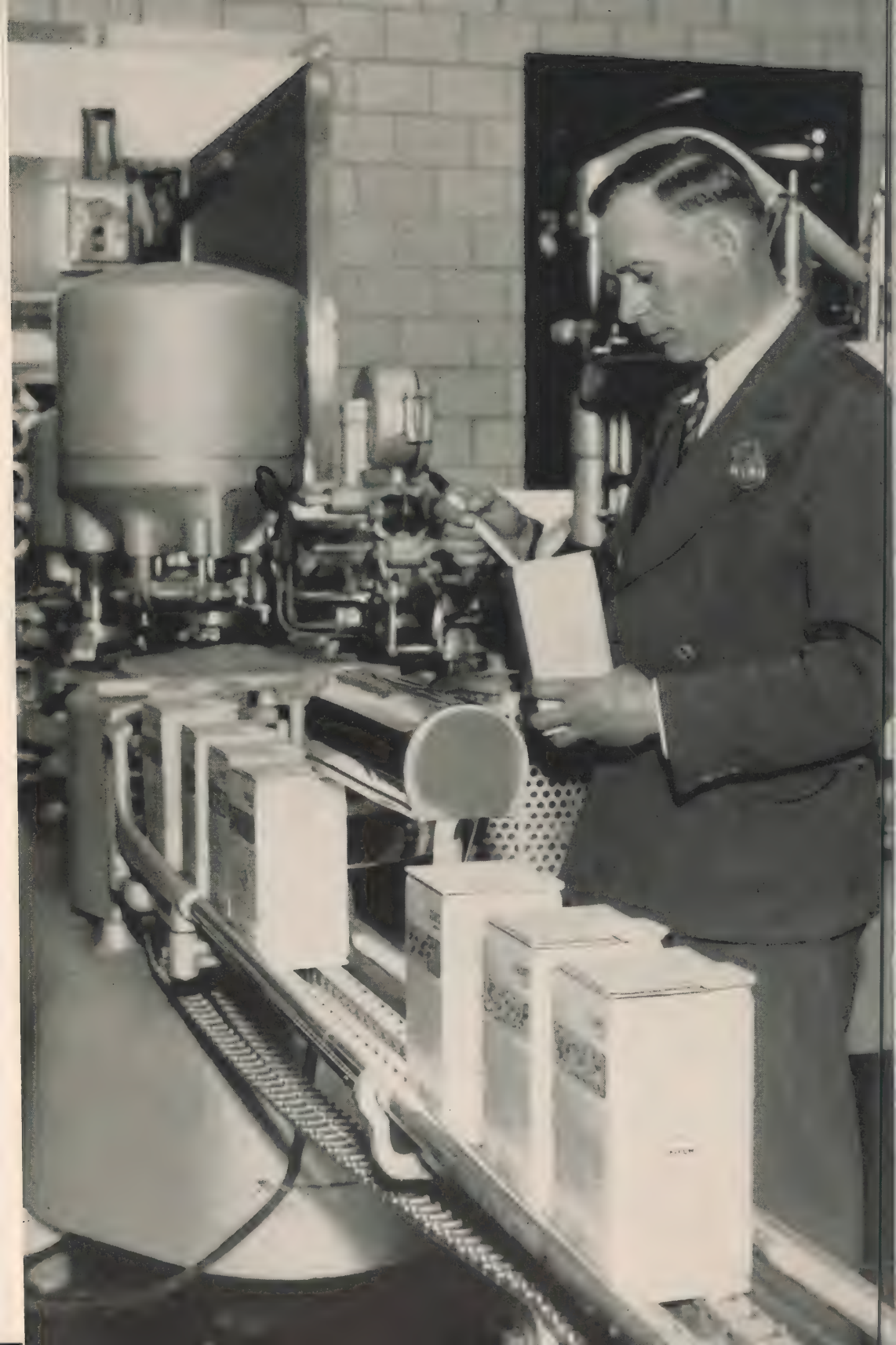
In previous years the Department's Law Division would prepare as many as 7,000 complaints a year for violations of the Sanitary Code. A total of 6,077 cases were prepared in 1933 by the Law Division for infraction of the sanitary laws as against 2,277 in 1940.

Milk Supervision. New York City's milk supply is drawn from a 400 mile radius of the city and embraces parts of seven states. Since 1934 new techniques and methods of inspection have been developed for milk supervision. The deck inspection of milk arriving at the country receiving plants and the phosphatase test for completeness of pasteurization are great advances in milk protection. The former is a method of rapid examination of the milk as delivered by dairymen to country receiving stations. The inspector tests the milk for temperature, odor, sediment and flakiness. Experienced inspectors can detect unsatisfactory milk by this method. As a result of this deck control, it is now possible to concentrate farm inspection work on those dairies which are most in need of such inspection.

The phosphatase field test probably represents the greatest single advance in milk control work since the advent of pasteurization. By its use an inspector within 10 minutes can tell whether a given lot of milk or cream has been properly pasteurized. The addition of less than one percent of raw milk to pasteurized milk, or a drop in the pasteurizing temperature of one degree, or a shortening in the holding time of four minutes can readily be picked up through the field test. A longer phosphatase laboratory test is even more sensitive.

Food and milk inspectors now carry kits to make tests in the field. The phosphatase test for pasteurization, the test for the percentage of alkali in washing solutions, and a paste test for determining the efficiency of pressure sprays in milkcan washing are new procedures which give the Department better and more prompt control in the field and save carting many samples back to the laboratory.

Low-cost milk was made available to children unable to secure it otherwise. Milk at eight cents per quart was sold to the needy at



various depots throughout the city. A "penny school milk program" sponsored by federal, state and city agencies was introduced. Under this plan a half pint of milk is sold at one cent to children at the schools. Families on relief are provided one quart of milk every other day for every child under 16 years of age.

SANITARY SERVICE

An average of about 200 individuals turn daily to the Department for relief on such problems as insanitary conditions in dwelling and lodging houses and work shops, pollution and bathing waters, noise and smoke nuisances, insect infestations and mosquito control. Every complaint receives prompt attention. While some matters are handled immediately without sending out inspectors, others require several inspections. About 70,000 complaints are received yearly and over 240,000 sanitary inspections made. Most attention is given to those nuisances which menace health.

With the onset of cold weather, from 12,000 to 15,000 complaints of lack of heat pour into the Health Department from apartment house dwellers. These complaints were formerly entered and turned over to the inspectors who struggled with the load and reached an apartment one or two weeks after the complaint was filed. This was changed and now letters are sent directly to owners or agents of apartment houses. Prompt attention has resulted. Postage and typists did the job at much less expense and more expeditiously than inspectors in the field. Second complaints shrank to one-fifth their former volume. The inspector now goes out only on second complaints.

Mosquito Control. The mosquito control work, formerly in charge of a part-time physician, was placed, in 1934, under the supervision of a sanitary engineer and an extensive program was mapped out. The work was done by laborers and engineers supplied by the W.P.A., under the supervision of the Health Department. In 1938 this project was transferred to the Department of Sanitation and the Department of Health became technical adviser.

Dog Bites. There are about 500,000 dogs in New York City



Playground on Roof of Health Center

Health Education Demonstration

and annually the Department receives about 30,000 reports of dog bites. These reports used to be investigated by uniformed policemen attached to the Department. Owing to the delays, since there was only a small staff available to handle this work, dogs were not surrendered to the shelter until three or four days later. Since July, 1938, owners are served notice directly by the Police Department within a few hours of the report. This has resulted in prompt surrender of the dogs and early examinations by veterinarians.

World's Fair. Notwithstanding the 3,000,000 visitors to the World's Fair, not a single outbreak of communicable disease or food poisoning occurred at the Fair. This can be ascribed to the expert medical and sanitary supervision organized by the Fair and its whole-hearted cooperation with the Department of Health.

Sanitary Code. In 1940 the Sanitary Code was amended to provide for a single designation for milk sold in the city and for a single set of standards to cover the production and sale of all milk in the city, except "certified."

The sections of the Sanitary Code related to drugs and cosmetics were revised in order to conform with the new federal and state acts on drugs and cosmetics.

STATISTICAL SERVICE

The Bureau of Vital Records and Statistics is not only the custodian of the official reports of births and deaths, but it is responsible for the preparation and analysis of the vital statistics, which enable the Health Department's work to be directed most effectively.

For three years prior to 1934 the Bureau of Records was in charge of an acting director. In January, 1935, a well-known statistician was appointed director and important improvements were introduced. Modern business machines were substituted for antiquated tabulation equipment, outmoded reports were replaced by a series of current summaries of immediate value, and special statistical analyses were made.

In addition to the preparation and analysis of vital statistics, other departments of the city government receive statistical information from the Bureau of Records.

The Department of Public Welfare receives daily a list of deaths reported in the previous 24 hours. Such lists serve in the settlement of insurance claims and also in the stoppage of payments to persons who were receiving old age assistance or other forms of relief. The Bureau of Records also furnishes the several divisions of the Department of Public Welfare with a large number of searchings and verifications of marriage, birth and death records, to determine the age, nationality, marital status, and the like, of relief recipients.

The Department of Housing and Buildings is required to keep a record of the causes of all deaths in multiple dwellings. To this end the Bureau of Records supplies that Department with a weekly list giving the

name, home address, age, date, place and primary cause of death of each person who dies in the city.

The Board of Elections receives a similar weekly list, which, however, does not include the cause of death. This list is used to eliminate the names of dead persons from the lists of qualified voters.

The W.P.A., the Parole Board, and other similar agencies also receive free searching and verification service for families or individuals who come within the scope of their activities.

The Bureau of Records also provides free searching and verification of vital records for veterans' organizations and voluntary welfare agencies in this city and state and in other cities and states throughout the country.

EDUCATION FOR HEALTH

The major health education activities conducted during 1934-1941 centered around the development of health education programs for the health center districts; safety, diphtheria, venereal disease and tuberculosis campaigns; publication of a new series of leaflets on maternity and child hygiene, diabetes, syphilis and gonorrhea, tuberculosis and on health centers; the printing and distribution of a quarterly magazine for physicians and a non-technical bimonthly bulletin; the planning of an exhibit for the World's Fair; the preparation of other special exhibits for district health centers, schools and other public places; scientific exhibits for physicians and public health workers, medical conventions and professional gatherings; and enlargement of the lecture and radio service.

A health education demonstration, made possible by private funds, was organized in December, 1938. This project was established for the purpose of testing various new techniques in order to determine their cost, effectiveness, applicability and limitation. The staff of the demonstration worked continually with the district health officers in developing more effective local educational programs.

Annual Reports. With its annual report for the year 1937, the Department has inaugurated a type of report which is not only infor-

mative but also attractive. The reports for 1937, 1938, 1939 and 1940¹ have been so prepared as to give to the public health worker as well as to the general public an understanding account of the Department activities. These reports are also used in schools of medicine and public health as well as colleges and high schools.

The 1937 report was called by Professor C. -E. A. Winslow "a model for all annual reports." The *American Journal of Public Health* singled out the 1938 report as one of the outstanding books on public health issued during that year. The *Health News*, of the New York State Health Department, of January 8, 1941, states that "these reports have set a standard well beyond common achievement in this field. They have become an appropriate message to the common people and taxpayers of the city."

While the reports are printed in limited editions, distribution is so arranged that no large library, no state health department and no large city health department in the United States is without a copy. In New York City all the branch libraries are supplied with copies.

Working and Learning. The quality of the service in all branches of the Health Department has been materially improved through a personnel training program, made possible by Social Security funds. Inquiries were made into the kind and nature of the jobs and duties of the employees. Lecture courses were organized for special groups. Capable specialists have been brought in to lecture, scholarships provided for study at local universities and at suitable public health schools in other cities, and noonday weekly forums at the Health Department headquarters conducted for the staff. A series of package libraries, with 30 duplicate sets of each package, was made up on various pertinent topics and circulated among the employees of the Department.

¹Health for 7,500,000. The 1937 Annual Report. 390 pp.; Health for New York City's Millions. The 1938 Annual Report. 295 pp.; Advances in New York City's Health. The 1939 Annual Report with a Review of Developments from 1934 to 1939. 296 pp.; An Account of Twelve Months of Health Defense. The 1940 Annual Report. 283 pp. \$1.00. John L. Rice, M.D., Commissioner. Reports edited by Savel Zimand and published by the Health Department.



Red Cross Home Nursing Class

Health Education Demonstration

HEALTH DEFENSES

In 1940 national defense came into the foreground. Health preparedness is not a new subject to a modern health department. By developing its activities and administering them intelligently and scientifically, a health department strengthens its health defenses. To be sure, when faced with an emergency, it is necessary to shift the emphasis. But certainly in an emergency a health department cannot afford to decrease its general health services. Thus, the New York City Health Department, while not curtailing its general program, shifted its emphasis. Since the beginning of 1940 the Department has been proceeding with the development of activities in connection with national defense. An example of this is the Department's tuberculosis and syphilis work in connection with the Selective Service Act.

In cooperation with the Army, inductees were x-rayed by the Health Department at various points in the city. The inductees rejected because of tuberculosis are now under medical supervision. The Department also provided a similar service for the National Guardsmen of New York City. The Department made serological tests for syphilis on specimens of blood submitted by the examining physicians on the local draft boards.

The danger of outbreaks of communicable diseases is greatly increased in times of disaster. Attention therefore has been given to the preparation and storage of vaccines and biologicals. In the fall of 1941 the Department had enough smallpox vaccine on hand for 1,000,000 vaccinations and if a greater number should demand such protection at one time, this amount could be increased.

Likewise, there is an ample supply of diphtheria toxoid, typhoid vaccine and tetanus antitoxin to meet an unusual demand. Plans are available for the manufacture of new supplies in considerable quantities on short notice. As new serums or vaccines are developed for other communicable diseases these will be manufactured and stored by the Department in quantities sufficient to meet an emergency.

Dr. Henry C. Sherman, professor of nutrition at Columbia University, has pointed out that if everyone had an *adequate* diet, instead of an *average* diet, 10 years could be added to our active life span. In order to help translate the available knowledge of nutrition into action, the Department has tried to give parents a better understanding of the principles of nutrition and their practical application in the selection and preparation of food. Special leaflets on this subject were prepared and other health education work was conducted. A nutritionist on the staff instructed nurses on food problems. To secure more knowledge of the medical aspects of the nutritional status of high school students, a very intensive study was made in cooperation with federal and private agencies. Low-cost milk was made available to children unable to secure it otherwise. Plans were made for an intensive nutrition education campaign to be started in the fall of 1941, as already mentioned earlier in this summary report.

In cooperation with the W.P.A. and the American Red Cross classes were organized in the summer of 1941, at the health centers, to train 100,000 civilians in first aid methods and techniques for use in a possible emergency.

Mayor LaGuardia, in a speech delivered on May 21, 1941, pointed out that "we cannot escape new responsibilities and new problems in an emergency." At the same time the Mayor emphasized that "the President of the United States has made it very clear that there should be no step backward and no losing of any of the ground that has been gained in public health and economic security and social welfare. Therefore, the government itself, in its normal public health work, will continue, if not increase, its efforts, and the same is applicable, of course, to state and local health departments."

The Health Department is fully alive to the imperative necessity of spending its available funds wisely and productively, and to this end is continually reexamining its methods and procedures and introducing indicated changes. The Department believes that the elimination of non-productive services are as much its responsibility as the establishment of new services. This policy the Department will continue to follow.

THIS BOOKLET WAS EDITED BY SAVEL ZIMAND

